

Name (max. 3): \_\_\_\_\_

Title: \_\_\_\_\_ Project #: \_\_\_\_\_

CMed 20/30

## **GRAPHIC DESIGN – 3D Model: Design and Produce**

### **Description**

This project requires you to design and produce a unique 3D model that serves a **practical function**. BE SURE TO GET YOUR PROJECT CONCEPT APPROVED PRIOR TO BEGINNING PRODUCTION. The design is restricted to a maximum weight of 20g for a solo project, 30g for a two-person project or 45g for a 3-person project. The complexity required depends on the number of people involved in the project. A solo project requires at *least* two components that will function together (like a Kinder Egg™ toy gets assembled), a two-person requires at least 3 unique components and a three-person requires at least 5 unique components.

People	Max. weight	Unique Components
ONE	20g	2
TWO	30g	3
THREE	45g	5

### **Format**

The model can be created using Sketchup (SKP), Beetleblocks (online) or other software that can export as an STL or OBJ file. If using Sketchup, the various components can be submitted as separate files or combined with break-away tabs to be printed as one unit. Ask to see samples to get a sense of scale and weight. Projects exceeding weight restrictions will not be printed and must be redesigned by scaling down or other weight-saving measures. Be sure to consider how 'printable' your model will be. You may need to add temporary supports to overhanging elements.

### **Pre-Production Elements**

Type out a design proposal that describes:

- the model you will be creating,
- its purpose/function
- estimated size

Include a rough sketch on this same document. You may print the proposal and then sketch by hand if preferred. The proposal must include **signature and date lines** to prove pre-approval. This **MUST** be submitted **prior to** the modelling phase and needs to be included with your other final documentation.

**\*\*Pre-planning is crucial as you will be limited to ONE reprint.\*\***

Scoring (20% - 40%)	Hard copy	E-file
<input type="checkbox"/> PRE-APPROVED design proposal	✓	X
<input type="checkbox"/> Rough sketch of design	✓	X

## Production Elements

Your model must meet the following criteria:

- Be an original design
- Have a practical purpose
- Be printable
- Have proper number of unique components
- Weigh no more than the maximum allowable
- Function as intended and be structurally sound

Be sure to preview previously printed models beforehand to get a sense of what may or may not be printable and actually work.

### Scoring (30% - 50%)

	Hard copy	E-file
<input type="checkbox"/> Digital STL/OBJ file <ul style="list-style-type: none"> <li>• Design is original</li> <li>• Has some practical purpose</li> <li>• Meets minimum number of required unique components</li> <li>• Meets weight restriction</li> </ul>	X	✓

## Post-Production Elements

Have a peer review your digital file and be prepared to make last minute adjustments. Submit printed model for scoring.

### Scoring (20% - 30%)

	Hard copy	E-file
<input type="checkbox"/> Peer review	X	✓
<input type="checkbox"/> Printed model that functions as intended	✓	X
<input type="checkbox"/> Project Reflection	X	✓
<input type="checkbox"/> Neatly organized duotang with all required papers	✓	X

## SUMMARY

A single element, done well, can be outstanding, however, done poorly, can bring down the entire feel of the entire production. Weight each category accordingly. Total must equal 100.

Category	Weight Range	Choose a weighting	Score
Pre-production	20% to 40%		
Production	30% to 50%		
Post-production	20% to 30%		
<b>TOTAL</b>		100%	